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SIGNIFICANT CHANGES IN INDIA DURING LOCK **DOWN PERIOD WITH AN IMPACT OF COVID-19**

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Abstract

Novel Corona virus disease (COVID-19) is an infectious disease caused by severe acute respiratory syndrome corona virus 2. It was first identified in the month of December in the year 2019. It was identified in Wuhan, China and spreading globally and there has been no ending yet. It has been spread all over world and in the month of January, 2020 it reached India and started spreading. Initially the Government of India has not expected the huge cases further, but due to rapid growth of heavy cases, the government of India has started lock down in the month of March with curfew on March 22, 2020. Total of 6 lockdowns have been announced from March 25th to 31st July with drastic changes and twenty four reports given to the Indian government by World Health Organization regarding COVID-19. The government of India could saturate the panic situations bringing social awareness among people saying preventive measures to be taken, in spite where few people could suffer during migrating. The leading role of fellows during COVID-19 period also affected by COVID is the most panic situation India faced whereby Indian Government has taken a strong decision on 7th June, 2020 that the COVID patients had to stay at home and take the treatment themselves. Social distancing among the public in all places, wearing masks and using sanitizers are found the main preventive measures for the controlling of Corona virus. The total number of cases registered in India was 10.5 Lakhs as of 18-07-2020.

Keywords: COVID-19, Corona virus, W.H.O., Migrants, Indian Government, Lockdown, Affect.

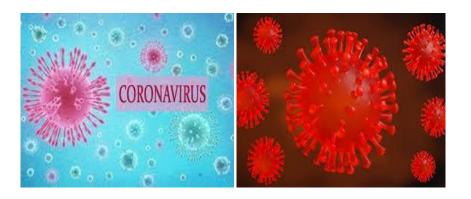
I. History and Types of Corona Virus

The name corona indicates "crown" or "wreath". [I] In the year 1960, Human corona virus was discovered. It is found it is more infecting the people whose age is more than 65 and less than 10. Since 2003, 7 new viruses have been recognized. It is infecting mainly the respiratory part. Below mentioned are the 7 cases which are recognized from 2003 to 2005.

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Virus	Location	Year
SARS-CoV	China	2002
NL63	Netherlands	2004
NL	Netherlands	2004
HCoV-NH	New Haven,CT	2005
HKU1	Hong Kong	2005
MERS-CoV	Soudi Arabia	2012
n-CoV	China	2019

II. Case Study



According to Canadian study 2001, it was identified with approximate of 500 candidates initially which was Flu-like system, out of which around 20 cases are confirmed with corona virus. In the year of 2002, many of the reports published that the corona virus is spreading to USA, Singapore, Thailand, Vietnam and Taiwan. Later it is proved around 1100 cases were identified in the year 2003 and the same year is considered as black year for the microbiologist. It was in cool manner initially

that the updates from China, Thailand, Korea and Japan that the disease of n-CoV is so moderate than SARS and MERS. This virus is found so danger that the disease transmits easily to the animals and mammal.

Types of Corona virus:

HCoV-229E	α Corona Virus
HCoV-NL63	α Corona Virus
HCoV-OC43	β Corona Virus
SARS-HC ₀ V	β Corona Virus
HCoV-HKU1	β Corona Virus
MERS-CoV	β Corona Virus
Whales and birds	γ Corona Virus
Pigs and birds	δ Corona Virus

Sweeping and Booming of Corona Virus

In December 2019, it was identified many people of Wuhan had to sent to hospitals for a common problem which is noticed in adults [II]. Surveillance is taken on blood samples of the patients which made them to have an outbreak in China. It is the only reason they identified as it is a virus that can spread to the human as well as mammals. As china people mostly depend on the sea food, they were in a situation the disease would be from the sea creatures and the people had stop eating sea food from January 1st 2020. It is the Huanan seafood wholesales Market in Wuhan1st 2020[III]. World Health Organization declared it as Corona virus on 7th January. The disease had a similarity of 95% with bat Corona Virus and 70% similarity with SARS-CoV. Then many people from Wuhan had travelled to Thailand, Japan and South Korea which could sense the same disease. It is observed it's the virus spreading from human to human [IV] which they could also notify to the people who are transmitting the patients to the Hospitals [V]. As of July 17, 2020 it was like 140 Lakh cases were identified worldwide.

The patients throughout the world increased exponentially and could not cope how to stop this. Only China could find an instantaneous solution of declaring lock down to the infectors and could find a good recovery rate later. It had come from the animal Bats is uncertain and had a quite suspicious on snakes and Pangolins.

J. Mech. Cont.& Math. Sci., Vol.-15, No.-8, August (2020) pp 8-16 Epidemic History of Corona Virus in India:

Lockdown Version	Lockdown Duration	Number of Days
Lockdown 1.0	25 th March-14 th April	21
Lockdown 2.0	15 th April-3 rd May	19
Lockdown 3.0	4 th -17 th May	14
Lockdown 4.0	18 th May-31 st May	14
Lockdown 5.0(Unlock 1.0)	1 st June-30 th June	30
Lockdown 6.0(Unlock 2.0)	1 st JuLY-31 st July	31

Janatha curfew was held on 22nd March, 2020. The same day it was told by honorable prime minister to clap hands themselves to show the appreciation towards doctors, police and media. It is told to start at 9 pm and for 9 minutes. Lockdown 1.0 has announced when the number of cases crossed around 500 [VI]. The lock down says to stop all the transportation facilities and educational institutions immediately. It also said every shop not to open till further instructions excluding essential needy shops, ATMs and petrol pumps. Once announced people found hurry in recruiting the essential stock and needs and many of the people found arrested if they have violated rules. Several state Governments had released funds to the poverty line people to which many of the celebrities and Business magnates helped the government. Lockdown 2.0 says that County had divided the entire state districts into red, orange and green zones giving relaxation to agriculture Business [VII] [VIII]. Lockdown 3.0 announced 130 districts as Red zone, 284 districts as Orange zone and 319 districts as Green zone. Some relaxations given to green and orange zones and putting the red zones in lockdown as usual [IX]. Lockdown 4.0 divided the red zones and containment and buffer zones giving relaxation to buffer zones [X]. Lockdown 5.0 had given complete relaxation which can be termed as UnLock1 [XI] where shopping malls, religious places like temples, masjids, churches, hotels, bar and restaurants to reopen from 8th June across India. Lockdown 5.0 had given complete relaxation which can be termed as UnLock1 where shopping malls, religious places like domestic flights, bus transportation, temples, masjids, churches, hotels, bar and restaurants to reopen across India. Lockdown 6.0 is one more relaxation where the states are planning to implement lockdown and Unlock strategy to revive the economy while ensuring arrest of virus spread.

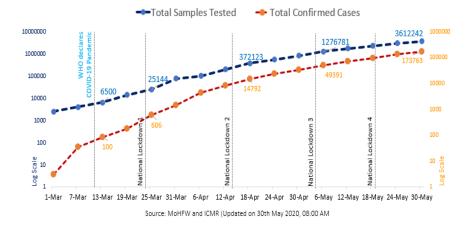
III. WHO has given 19 reports from Jan 1st 2020 to 12th July 2020

WHO Report	Released date	Cumulative Number of Confirmed Cases	WHO Report	Released date	Cumulative Number of Confirmed Cases
Report1	31st Jan,2020	1	Report13	26 th April,2020	26917
Report2	6 th Feb,2020	3	Report14	3 rd May,2020	40263

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Report3	13 th Feb,2020	3	Report15	10 th May,2020	62939
Report4	21st Feb,2020	3	Report16	17 th May,2020	90927
Report5	28 th Feb,2020	3	Report17	24 th May,2020	131868
Report6	9 th March,2020	44	Report18	31 st May,2020	182143
Report7	14 th March,2020	84	Report19	7th June,2020	235657
Report8	22 March,2020	<mark>360</mark>	Report20	14 th June,2020	308993
Report9	28 th March,2020	909	Report21	21 st June,2020	410461
Report10	12 th July,2020	3577	Report22	21 st June,2020	508953
Report11	12 th April,2020	8447	Report23	5 th July,2020	648315
Report12	19 th April,2020	16116	Report24	13 th July,2020	849553

Corona Virus is the disease may be transmitted from person to person through droplets or contact [XII]. The first patient reported in China on 30th January 2020. Frequent hand-washing or sanitisation of hands is necessary after meeting with ill people or visited their environment. This preventive measure is given by World Health Organization. Few reports told by WHO is Indian government had started screening the passengers whoever came from china from January 15th [XIII]. Ministry of Home affairs (MHA) issued new guide lines to fight COVID-19 and for unlock-1 states reopening of the areas outside the containment zones with effective from June 1st, 2020.



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IV. Pandemic Situation in India During COVID Lockdown

Citizens of India were in a panic situation about their lives once they known corona virus is spreading and lockdown announced. Most of the people stood home and they are now with a complete mind set their lives will be safe only if they stay at home. So a famous slogan became viral everywhere "STAY HOME STAY SAFE" [XIV]. Putin warned Russian citizens to stay home for 15 days otherwise put in Jail for 5 years and he said the statement is over is the false statement later known [XV]. Italy is the country with 6 crores population and couldn't control and how about 140 crores population of India. Italy is the country having 2nd place in Medicine and India 140 position. The above such statements put the Indian people lack of confidence; however India could stop spreading of virus successfully till two Lockdowns. Government of India launched an app Aarogya setu [XVI] (The Bridge for liberation from disease) an Indian open source platform for COVID-19 on April 2nd April 2020.It has 4 sections like user status, self access, COVID-19 updates and E-pass integration. It tells even number of positive cases is likely to happen in a radius of 0.5 km, 1 km, 5 km and 10 km from the user.

The biggest issue during COVID period is the Migrant People [XVII]. People had to struck in the places where they have been and there is no chance of migrating now to their native places. As everything went lock in the cities now the migrants found difficulty in surviving themselves, even then found their own way of travelling themselves on foot and bicycles. Once Educational Institutions stopped closing, Faculty started teaching the lessons through zoom app, Google Classroom, Courser a etc. and there by which few students found difficulty in understanding the classes as no proper net connection.

It took 110 days for India to have COVID cases from 1 to 1 Lakh and just 15 days to get the count to 2 Lakhs. The count is 10.5 Lakhs now. This is what India facing the situation. The situation of Maharashtra is worse than a war zone [XVIII]. A dangerous situation India had to face if once 600 doctors stop their services. Patients had to go corporate hospitals where they have to charge more for getting their treatment cure. It had a news of total 198 types of Corona Virus [XI] have been identified in India in which there are 55 types of corona only in Telangana, 73 in Gujarat, 39 cases in Delhi, 15 in Maharashtra and 15 in Karnataka. The Railways had to stop the services after 167 years in its history. On June 7th a TV5 Reporter Manoj Kumar died due to Corona Virus at the age of 30 in Gandhi Hospital, Hyderabad. On June 8th Delhi Chief Minister has to put into Quarantine as he had features of COVID. Government had taken a final decision of not conducting exams to tenth on June 8th as the same date from where the exams are supposed to be. A strong decision made by the Central Government on June 8th that no patient affected with Corona Virus from now shall come to hospital and have his treatment on his own staying at home.

In an Article, It was told by Dr.V. Ravi that Corona Virus will be affected to almost 50% of our population by December. Almost 90% of that particular population will not know that they really affected, 5% will be requiring high flow oxygen and more 5% will be requiring ventilators. It's not so dangerous as SARS and MERS. The death rate would be 3 to 4%. Dr.V. Ravi is Head of Neurology in The National

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Institute of Mental Health and Neuro-Sciences (Nimhans) and he is the Karnataka COVID-19 task force nodal officer.

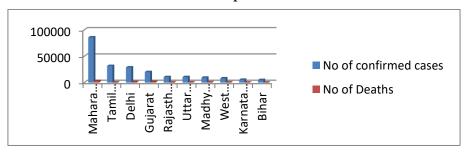
An article, Deccan Chronicle on June 6th has stated 171 doctors have reported positive for COVID-19 only in Telangana State [XX]. It is the count of only government doctors and about 20 private doctors who are affected have been home-quarantined. The government has decided to close 5 departments to till June 9th as sanitization is to be carried out in the specialty block.1)The out-patient for medical and surgical gastroenterology 2)The in-patient services for medical and surgical gastroenterology 3)Urology4)Cardiology5)Surgical oncology. The Government of Telangana declared Mahatma Gandhi Hospital in Warangal district as Complete COVID Hospital on 16th July 2020.

V. Results

Top 10 Most Affected states in India as of 12th July, 2020

S. No	State	Corona Virus Patients	Deaths
1	Maharashtra	246600	10116
2	Tamil Nadu	134226	1898
3	Delhi	110921	3334
4	Gujarat	40941	2032
5	Karnataka	36216	503
6	Uttar Pradesh	35092	913
7	Telangana	33402	309
8	West Bengal	28453	906
9	Andhra Pradesh	27235	613
10	Rajasthan	23748	348

Graphs:



VI. Conclusion

There are plenty of viruses maximum of which circulate in animals. Only seven of these viruses infect humans. Humans could control spreading of Corona taking preventive measures. There was a case study in china where more than 33% of the medical staff suffered with insomnia during the COVID-19 outbreak. It was around 1600 candidates on which the case study was taken to which of almost 600 candidates suffered with insomnia. The insomnia percentage is found to be 34% in Hong Kong and 37% in Taiwan during the SARS epidemic. So it's in our hands now how to stop spreading of corona virus. 99% of the ICU Beds are completely filled in Maharashtra with COVID patients as of now. May be in a hardly of 6 to 9 months an accurate COVID vaccine could come into market. Preventive measures suggested by Indian government would only help us. India is protected when our families are protected. Our families are protected when we protect ourselves. So it is in our hands now to protect our nation India from corona virus.

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